

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>			1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. AM-0002		3. EFFECTIVE DATE 4/26/04		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)
6. ISSUED BY US Army Engineer District, Honolulu Corps of Engineers, Bldg S-200 Fort Shafter, HI 96858-5440 Contract Specialist: Kent Tamai		CODE		7. ADMINISTERED BY (If other than Item 6)		CODE
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code)				<input checked="" type="checkbox"/> 9A. AMENDMENT OF SOLICITATION NO. W9128A-04-R-0010 <input checked="" type="checkbox"/> 9B. DATED (SEE ITEM 11) 3/31/04 <input type="checkbox"/> 10A. MODIFICATION OF CONTRACT/ORDER NO. <input type="checkbox"/> 10B. DATED (SEE ITEM 13)		
CODE		FACILITY CODE				

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☒ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning \_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS,  
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

<input checked="" type="checkbox"/>	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
<input type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
<input type="checkbox"/>	D. OTHER (Specify type of modification and authority)

**E. IMPORTANT:** Contractor ☐ is not, ☐ is required to sign this document and return \_\_\_\_ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Multiple Award Task Order Contract (MATOC) for Design-Build Construction Services and Design-Bid-Build Construction Services, Various Locations, Hawaii

See Page 2 of 2 Pages

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		BY (Signature of Contracting Officer)	

1. CHANGES TO THE SOLICITATION. Attached hereto are new and revised pages to the solicitation. The revision mark "(AM-0002)" is shown on each page.

a. REVISED PARAGRAPHS. The following are revised paragraphs to the specifications. Changes are indicated in **bold**.

Section 01430 para 1.3, 3.1.2, 3.1.4.2

b. REVISED PROVISIONS/CLAUSES/PAGES.

Following is the revised page to the solicitation. Changes are indicated in bold print. The entire section will not be re-issued under AM-0001.

Section 00010  
SF 1442, Page 1 (Proposal due date extended)

Section 00100  
Page 00100-11 (Provision S-28.3 revised)

c. NEW PAGES. The following Sections are added to the specification:

Section 00900, Pages A.4 through A.5  
Section 01312  
Section 01320  
Section 01451

d. DELETED PAGES. The following Sections are deleted from the specifications:

Section 01312  
Section 01320  
Section 01451

2. The proposal due date is EXTENDED to May 4, 2004, 2:00 P.M., Hawaii Standard Time.

<b>SOLICITATION, OFFER, AND AWARD</b> <i>(Construction, Alteration, or Repair)</i>		1. SOLICITATION NO.  W9128A-04-R-0010	2. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	3. DATE ISSUED  31-Mar-2004	PAGE OF PAGES  1
<b>IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.</b>					
4. CONTRACT NO.		5. REQUISITION/PURCHASE REQUEST NO.  OTCKAT-FY04-0005		6. PROJECT NO.	
7. ISSUED BY  CONTRACTING DIVISION USAED, HONOLULU BLDG S230 FT. SHAFTER HI 96858-5440  TEL:                      FAX:		CODE W9128A		8. ADDRESS OFFER TO (If Other Than Item 7) CODE Contracting Division (CEPOH-CT-C) US Army Engineer District, Honolulu Bldg 230 Fort Shafter, Hawaii 96858-5440 (Deliver hand-carried proposals to Room 115, Bldg 200, Fort Shafter, Hawaii 96858-5440)	
9. FOR INFORMATION CALL:		A. NAME KENT A TAMAI		B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) 808-438-9700	
<b>SOLICITATION</b>					
<b>NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".</b>					
10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS. <i>(Title, identifying no., date)</i>  Request for Proposals No. DACA83-04-R-0010, Multiple Award Task Order Contract (MATOC) for Design-Build Construction Services and Design-Bid-Build Construction Services, Various Locations, Hawaii  MAIN TABLE OF CONTENTS					
11. The Contractor shall begin performance within _____ calendar days and complete it within _____ calendar days after receiving <input type="checkbox"/> award, <input type="checkbox"/> notice to proceed. This performance period is <input checked="" type="checkbox"/> mandatory, <input type="checkbox"/> negotiable. (See FAR 52.211-10.)					
12 A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (If "YES," indicate within how many calendar days after award in Item 12B.) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO					12B. CALENDAR DAYS  14
13. ADDITIONAL SOLICITATION REQUIREMENTS: A. Sealed offers in original and 6 copies to perform the work required are due at the place specified in Item 8 by <u>2:00 P.M.</u> (hour) local time <u>5/4/04</u> (date). If this is a sealed bid solicitation, offers must be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due. B. An offer guarantee <input checked="" type="checkbox"/> is, <input type="checkbox"/> is not required. C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference. D. Offers providing less than <u>60</u> calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.					

When a small business subcontracting plan is required by FAR clause entitled, "SMALL BUSINESS SUBCONTRACTING PLAN", the minimum goal that will be accepted for subcontracting with Small Disadvantaged Business is five percent (5%).

[End of Statement]

## S-2 ASBESTOS ABATEMENT (AUG 1996)

Asbestos abatement is part of the scope of work for the proposed contract. Refer to paragraphs entitled, "ASBESTOS --- (OCCUPATIONAL HEALTH AND ENVIRONMENTAL)" in Section 00800 and applicable sections of the technical specifications and drawings. The Contractor shall inform responsible representatives of their insurer(s)/surety(ies) that asbestos abatement is required for the proposed contract.

[End of Statement]

## S-28.3 PENAL SUM AND FORM OF OFFER GUARANTEE

(Applicable to offers exceeding \$100,000)

Each offeror shall submit with its offer a separate offer guarantee using Standard Form 24, Bid Bond, with good and sufficient surety or sureties acceptable to the Government, or other security as provided in the clause entitled OFFER GUARANTEE in the CONTRACT CLAUSES section. This security shall be in the form of **TWO MILLION, NINE HUNDRED SIXTEEN THOUSAND, SIX HUNDRED SIXTY-SEVEN DOLLARS (\$2,916,667)**.

Failure to submit a offer guarantee by the time and date set for receipt of proposals may be cause for rejection of a proposal, except as provided in provision 52.215-1, Instructions to Offerors--Competitive Acquisition.

[End of Statement]

## S-36.2 MAGNITUDE OF THE PROPOSED PROJECT [FAR 36.204]

### (a) Physical Characteristics:

Work will include general design and construction projects to include but not limited to such areas as civil, architectural, structural, mechanical, electrical, security, communications, asbestos removal and lead abatement.

### (b) Estimated Price Range: The estimated price range of this work is:

A minimum of three awards will be made. The maximum dollar value that the Government will order under all of the contracts awarded will be \$175,000,000.00. There is no maximum amount per base or option period. The guaranteed minimum quantity for the base period of the contract is 2% of the average amount per period divided by the number of contracts. If the option period is exercised, the minimum guaranteed amount would be 1% of the average amount per period divided by the number of contracts.

[End of Statement]

SECTION 00900  
RESPONSES TO QUESTIONS  
SUBMITTED BY PLANHOLDERS  
FOR  
RFP NO. W9128A-04-R-0010

Q11. From Tony Diaz, Parsons, e-mail dated 4/16/04:

On page 00120-4 of Section 2.4 of the RFP, it states that "All contractors in a joint venture must provide evidence of a binding teaming agreement or other contractual agreement, which creates legal responsibility on the part of all contractors in the joint venture." If the offeror submits a Memorandum of Understanding (MOU) between itself and another party which clearly states that the two firms contemplating the JV will officially form the JV upon contract award, will this requirement be satisfied?

A11. No. The Government requires a binding agreement or contractual agreement prior to submission of proposals so award can be made to successful offerors immediately after evaluations are concluded.

Q12. From Tony Diaz, Parsons, e-mail dated 4/16/04:

Project Data Sheet: Criteria in Section 00120, paragraph 2.4.1, state: "Relevant projects...were completed between April 1998 and April 2004..." The Project Data Sheet form states: "Use this form to document relevant projects that have been completed between March 1999 and March 2004."

We assume that paragraph 2.4.1 is correct. Please confirm.

A12. Criteria in Section 00120, Paragraph 2.4.1 is correct. Information on the Project Data Sheet has been corrected in Amendment 0001.

Q13. From Tony Diaz, Parsons, e-mail dated 4/16/04:

Past Performance Evaluation Sheet: Criteria in paragraph 2.4.3 of Section 00120 state: "Evaluations shall be submitted to the Point of Contact shown in subparagraph 1.2 of this section by the date and time set for receipt of proposals." The Past Performance Evaluation Sheet states: "Please return the evaluation to the contractor" Which is correct?

A13. Criteria in Section 00120, Paragraph 2.4.3 is correct. Information on the Project Data Sheet has been corrected in Amendment AM-0001.

Q14. From Lance Wilhelm, Kiewit Pacific, e-mail dated 4/16/04:

In what amount shall the Contractors provide the Proposal Bond? The bond amount is generally a function of the size of the contract, but without a contract amount, we need to know how much to make the bond out for.

A14. Amendment AM-0002 amends Section 00100, "S-28.3 Penal Sum and Form of Offer Guarantee" to reflect an amount for the offer guarantee.

Q15. From Chris Nasu, Alutiig-Mele, LLC, e-mail dated 4/16/04:

What is the difference between a "Binding Teaming Agreement and JV?"

A15. A binding teaming agreement or a contractual agreement creates the legal responsibility between all contractors in a joint venture.

Q16. From Chris Nasu, Alutiig-Mele, LLC, e-mail dated 4/16/04:

If there was a binding agreement between the Prime and a sub, would the Corps then consider the subs qualifications as part of the team qualifications?

A16. Yes, as long as the binding teaming agreement or contractual agreement results in a joint venture where legal responsibility for the contract is shared by all contractors in the joint venture.

Q17. We would like USACE to consider projects under Factor I, Past Experience that are currently under construction. Also, we would like to know if the \$5 million floor for Relevant Projects can be lowered at all.

A17. Since the Government will evaluate both past experience and past performance on the same projects submitted by the offerors, only completed projects will be considered. The \$5 million floor for relevant projects cannot be lowered.

# SECTION TABLE OF CONTENTS

## DIVISION 01 - GENERAL REQUIREMENTS

### SECTION 01312Q

#### QUALITY CONTROL SYSTEM (QCS)

#### PART 1 GENERAL

- 1.1 GENERAL
  - 1.1.1 Applicability
  - 1.1.2 Correspondence and Electronic Communications
  - 1.1.3 Other Factors
- 1.2 QCS SOFTWARE
- 1.3 SYSTEM REQUIREMENTS
- 1.4 RELATED INFORMATION
  - 1.4.1 QCS User Guide
  - 1.4.2 Contractor Quality Control (CQC) Training
- 1.5 CONTRACT DATABASE
- 1.6 DATABASE MAINTENANCE
  - 1.6.1 Administration
    - 1.6.1.1 Contractor Information
    - 1.6.1.2 Subcontractor Information
    - 1.6.1.3 Correspondence
    - 1.6.1.4 Equipment
    - 1.6.1.5 Management Reporting
  - 1.6.2 Finances
    - 1.6.2.1 Pay Activity Data
    - 1.6.2.2 Payment Requests
  - 1.6.3 Quality Control (QC)
    - 1.6.3.1 Daily Contractor Quality Control (CQC) Reports.
    - 1.6.3.2 Deficiency Tracking.
    - 1.6.3.3 Three-Phase Control Meetings
    - 1.6.3.4 Accident/Safety Tracking.
    - 1.6.3.5 Features of Work
    - 1.6.3.6 QC Requirements
  - 1.6.4 Submittal Management
  - 1.6.5 Schedule
  - 1.6.6 Import/Export of Data
- 1.7 IMPLEMENTATION
- 1.8 DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM
  - 1.8.1 File Medium
  - 1.8.2 Disk or CD-ROM Labels
  - 1.8.3 File Names
- 1.9 MONTHLY COORDINATION MEETING
- 1.10 NOTIFICATION OF NONCOMPLIANCE

#### PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section Table of Contents --



## SECTION 01312Q

## QUALITY CONTROL SYSTEM (QCS)

## PART 1 GENERAL

## 1.1 GENERAL

The Government will use the Resident Management System for Windows (RMS) to assist in its monitoring and administration of this contract. The Contractor shall use the Government-furnished Construction Contractor Module of RMS, referred to as QCS, to record, maintain, and submit various information throughout the contract period. This joint Government-Contractor use of RMS and QCS will facilitate electronic exchange of information and overall management of the contract. QCS provides the means for the Contractor to input, track, and electronically share information with the Government in the following areas:

- Administration
- Finances
- Quality Control
- Submittal Monitoring
- Scheduling
- Import/Export of Data

## 1.1.1 Applicability

QCS shall be used on the contract as well as all construction task orders.

## 1.1.2 Correspondence and Electronic Communications

For ease and speed of communications, both Government and Contractor will, to the maximum extent feasible, exchange correspondence and other documents in electronic format. Correspondence, pay requests and other documents comprising the official contract record shall also be provided in paper format, with signatures and dates where necessary. Paper documents will govern, in the event of discrepancy with the electronic version.

## 1.1.3 Other Factors

Particular attention is directed to Contract Clause, "Schedules for Construction Contracts", Contract Clause, "Payments", Section 01320, PROJECT SCHEDULE, Section 01330, SUBMITTAL PROCEDURES, and Section 01451, CONTRACTOR QUALITY CONTROL, which have a direct relationship to the reporting to be accomplished through QCS. Also, there is no separate payment for establishing and maintaining the QCS database; all costs associated therewith shall be included in the task order pricing for the work.

## 1.2 QCS SOFTWARE

QCS is a Windows-based program that can be run on a stand-alone personal computer or on a network. The Government will make available the QCS software to the Contractor after issuance of a task order. Prior to the Pre-Construction Conference, the Contractor shall be responsible to download, install and use the latest version of the QCS software from the Government's RMS Internet Website, (<http://winrms.usace.army.mil/contractor's.htm>). Upon specific justification and request by the Contractor, the Government can provide QCS on 3-1/2 inch high-density diskettes or CD-ROM. Any program updates of QCS will be made available to the Contractor via the Government RMS Website as they become available.

## 1.3 SYSTEM REQUIREMENTS

The following listed hardware and software is the minimum system configuration that the Contractor shall have to run QCS:

### Hardware

IBM-compatible PC with 500 MHz Pentium or higher processor

128+ MB RAM for workstation / 256+ MB RAM for server.

1 GB hard drive disk space for sole use by the QCS system.

3-1/2 inch high-density floppy drive.

Compact Disk (CD) Reader 8x speed or higher.

SVGA or higher resolution monitor (1024x768, 256 colors).

Mouse or other pointing device.

Windows compatible printer. (Laser printer must have 4 MB+ of RAM).

Connection to the Internet, minimum 56k BPS.

### Software

MS Windows 98, ME, NT, or 2000.

Word Processing software compatible with MS Word 97 or newer.

Latest version of: Netscape Navigator, Microsoft Internet Explorer, or other browser that supports HTML 4.0 or higher.

Electronic mail (E-mail) MAPI compatible.

#### Software

Virus protection software that is regularly upgraded with all issued manufacturer's updates.

### 1.4 RELATED INFORMATION

#### 1.4.1 QCS User Guide

After contract award, the Contractor shall download instructions for the installation and use of QCS from the Government RMS Internet Website. In case of justifiable difficulties, the Government will provide the Contractor with a CD-ROM containing these instructions.

#### 1.4.2 Contractor Quality Control (CQC) Training

The use of QCS will be discussed with the Contractor's QC System Manager in the course entitled, "Construction Quality Management For Contractors" (Section 01451).

### 1.5 CONTRACT DATABASE

Prior to the pre-construction conference, the Government will provide the Contractor with basic task order award data to use for QCS. The Government will provide data updates to the Contractor as needed, generally by files attached to E-mail. These updates will generally consist of submittal reviews, correspondence status, QA comments, and other administrative and QA data.

### 1.6 DATABASE MAINTENANCE

The Contractor shall establish, maintain, and update data for the contract in the QCS database throughout the duration of the contract. The Contractor shall establish and maintain the QCS database at the Contractor's site office. Data updates to the Government shall be submitted by E-mail with file attachments, e.g., daily reports, schedule updates, payment requests. If permitted by the Contracting Officer, a data diskette or CD-ROM may be used instead of E-mail (see Paragraph DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM). The QCS database typically shall include current data on the following items:

#### 1.6.1 Administration

##### 1.6.1.1 Contractor Information

The database shall contain the Contractor's name, address, telephone numbers, management staff, and other required items. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver Contractor administrative data in electronic format via E-mail.

##### 1.6.1.2 Subcontractor Information

The database shall contain the name, trade, address, phone numbers, and

other required information for all subcontractors. A subcontractor must be listed separately for each trade to be performed. Each subcontractor/trade shall be assigned a unique Responsibility Code, provided in QCS. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver subcontractor administrative data in electronic format via E-mail.

#### 1.6.1.3 Correspondence

All Contractor correspondence to the Government shall be identified with a serial number. Correspondence initiated by the Contractor's site office shall be prefixed with "S". Letters initiated by the Contractor's home (main) office shall be prefixed with "H". Letters shall be numbered starting from 0001. (e.g., H-0001 or S-0001). The Government's letters to the Contractor will be prefixed with "C".

#### 1.6.1.4 Equipment

The Contractor's QCS database shall contain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates.

#### 1.6.1.5 Management Reporting

QCS includes a number of reports that Contractor management can use to track the status of the project. The value of these reports is reflective of the quality of the data input, and is maintained in the various sections of QCS. Among these reports are: Progress Payment Request worksheet, QA/QC comments, Submittal Register Status, Three-Phase Inspection checklists.

#### 1.6.2 Finances

##### 1.6.2.1 Pay Activity Data

The QCS database shall include a list of pay activities that the Contractor shall develop in conjunction with the construction schedule. The sum of all pay activities shall be equal to the total contract amount, including modifications. Pay activities shall be grouped by Item Number (IN), and the sum of the activities shall equal the amount of each IN. The total of all INs equals the task order total.

##### 1.6.2.2 Payment Requests

All progress payment requests shall be prepared using QCS. The Contractor shall complete the payment request worksheet and include it with the payment request. The work completed under the task order, measured as percent or as specific quantities, shall be updated at least monthly. After the update, the Contractor shall generate a payment request report using QCS. The Contractor shall submit the payment requests with supporting data by E-mail with file attachment(s). If permitted by the Contracting Officer, a data diskette may be used instead of E-mail. A signed paper copy of the approved payment request is also required, which shall govern in the event of discrepancy with the electronic version.

### 1.6.3 Quality Control (QC)

QCS provides a means to track implementation of the 3-phase QC Control System, prepare daily reports, identify and track deficiencies, document progress of work, and support other contractor QC requirements. The Contractor shall maintain this data on a daily basis. Entered data will automatically output to the QCS generated daily report. The Contractor shall provide the Government a task-specific quality control plan within the time required in Section 01451, CONTRACTOR QUALITY CONTROL. Within seven calendar days of Government acceptance, the Contractor shall submit a data diskette or CD-ROM reflecting the information contained in the accepted task-specific quality control Plan: schedule, pay activities, features of work, submittal register, QC requirements, and equipment list.

#### 1.6.3.1 Daily Contractor Quality Control (CQC) Reports.

QCS includes the means to produce the Daily CQC Report. The Contractor may use other formats to record basic QC data. However, the Daily CQC Report generated by QCS shall be the Contractor's official report. Data from any supplemental reports by the Contractor shall be summarized and consolidated onto the QCS-generated Daily CQC Report. Daily CQC Reports shall be submitted as required by Section 01451, CONTRACTOR QUALITY CONTROL. Reports shall be submitted electronically to the Government using E-mail or diskette within 24 hours after the date covered by the report. Use of either mode of submittal shall be coordinated with the Government representative. The Contractor shall also provide the Government a signed, printed copy of the daily CQC report.

#### 1.6.3.2 Deficiency Tracking.

The Contractor shall use QCS to track deficiencies. Deficiencies identified by the Contractor will be numerically tracked using QC punch list items. The Contractor shall maintain a current log of its QC punch list items in the QCS database. The Government will log the deficiencies it has identified using its QA punch list items. The Government's QA punch list items will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of both QC and QA punch list items.

#### 1.6.3.3 Three-Phase Control Meetings

The Contractor shall maintain scheduled and actual dates and times of preparatory and initial control meetings in QCS.

#### 1.6.3.4 Accident/Safety Tracking.

The Government will issue safety comments, directions, or guidance whenever safety deficiencies are observed. The Government's safety comments will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of the safety comments. In addition, the Contractor shall utilize QCS to advise the Government of any accidents occurring on the jobsite. This brief supplemental entry is not to be considered as a substitute for completion of mandatory reports, e.g., ENG Form 3394 and OSHA Form 200.

#### 1.6.3.5 Features of Work

The Contractor shall include a complete list of the features of work in the QCS database. A feature of work may be associated with multiple pay activities. However, each pay activity (see subparagraph "Pay Activity Data" of paragraph "Finances") will only be linked to a single feature of work.

#### 1.6.3.6 QC Requirements

The Contractor shall develop and maintain a complete list of QC testing, transferred and installed property, and user training requirements in QCS. The Contractor shall update all data on these QC requirements as work progresses, and shall promptly provide this information to the Government via QCS.

#### 1.6.4 Submittal Management

The Government will provide the initial submittal register, ENG Form 4288, SUBMITTAL REGISTER, in electronic format. Thereafter, the Contractor shall maintain a complete list of all submittals, including completion of all data columns. Dates on which submittals are received and returned by the Government will be included in its export file to the Contractor. The Contractor shall use QCS to track and transmit all submittals. ENG Form 4025, submittal transmittal form, and the submittal register update, ENG Form 4288, shall be produced using QCS. RMS will be used to update, store and exchange submittal registers and transmittals, but will not be used for storage of actual submittals.

#### 1.6.5 Schedule

The Contractor shall develop a construction schedule consisting of pay activities, in accordance with Contract Clause "Schedules for Construction Contracts", or Section 01320, PROJECT SCHEDULE, as applicable. This schedule shall be input and maintained in the QCS database either manually or by using the Standard Data Exchange Format (SDEF) (see Section 01320 PROJECT SCHEDULE). The updated schedule data shall be included with each pay request submitted by the Contractor.

#### 1.6.6 Import/Export of Data

QCS includes the ability to export Contractor data to the Government and to import submittal register and other Government-provided data, and schedule data using SDEF.

### 1.7 IMPLEMENTATION

Contractor use of QCS as described in the preceding paragraphs is mandatory. The Contractor shall ensure that sufficient resources are available to maintain its QCS database, and to provide the Government with regular database updates. QCS shall be an integral part of the Contractor's management of quality control.

## 1.8 DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM

The Government-preferred method for Contractor's submission of updates, payment requests, correspondence and other data is by E-mail with file attachment(s). For locations where this is not feasible, the Contracting Officer may permit use of computer diskettes or CD-ROM for data transfer. Data on the disks or CDs shall be exported using the QCS built-in export function. If used, diskettes and CD-ROMs will be submitted in accordance with the following:

### 1.8.1 File Medium

The Contractor shall submit required data on 3-1/2 inch double-sided high-density diskettes formatted to hold 1.44 MB of data, capable of running under Microsoft Windows 95 or newer. Alternatively, CD-ROMs may be used. They shall conform to industry standards used in the United States. All data shall be provided in English.

### 1.8.2 Disk or CD-ROM Labels

The Contractor shall affix a permanent exterior label to each diskette and CD-ROM submitted. The label shall indicate in English, the QCS file name, full contract and task order numbers, task order name, project location, data date, name and telephone number of person responsible for the data.

### 1.8.3 File Names

The Government will provide the file names to be used by the Contractor with the QCS software.

## 1.9 MONTHLY COORDINATION MEETING

The Contractor shall update the QCS database each workday. At least monthly, the Contractor shall generate and submit an export file to the Government with schedule update and progress payment request. As required in Contract Clause "Payments", at least one week prior to submittal, the Contractor shall meet with the Government representative to review the planned progress payment data submission for errors and omissions. The Contractor shall make all required corrections prior to Government acceptance of the export file and progress payment request. Payment requests accompanied by incomplete or incorrect data submittals will be returned. The Government will not process progress payments until an acceptable QCS export file is received.

## 1.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section --



SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01320Q

PROJECT SCHEDULE

PART 1 GENERAL

- 1.1 DEFINITIONS
- 1.2 APPLICABILITY
- 1.3 LEVEL OF DETAIL
- 1.4 TASK ORDER DEPENDENCIES
- 1.5 ELECTRONIC SCHEDULE REQUIREMENT
- 1.6 SUBMITTALS
- 1.7 QUALIFICATIONS

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 GENERAL
- 3.2 BASIS FOR PAYMENT
- 3.3 ELECTRONIC PROJECT SCHEDULE
  - 3.3.1 Use of the Critical Path Method
  - 3.3.2 Level of Detail Required
    - 3.3.2.1 Activity Durations
    - 3.3.2.2 Procurement Activities
    - 3.3.2.3 Government Activities
    - 3.3.2.4 Responsibility
    - 3.3.2.5 Work Areas
    - 3.3.2.6 Modification or Claim Number
    - 3.3.2.7 Bid Item
    - 3.3.2.8 Feature of Work
  - 3.3.3 Scheduled Project Completion
    - 3.3.3.1 Project Start Date
    - 3.3.3.2 Constraint of Last Activity
    - 3.3.3.3 Early Project Completion
  - 3.3.4 Interim Completion Dates
  - 3.3.5 Default Progress Data Disallowed
  - 3.3.6 Out-of-Sequence Progress
  - 3.3.7 Extended Non-Work Periods
  - 3.3.8 Negative Lags
- 3.4 PROJECT SCHEDULE SUBMISSIONS
  - 3.4.1 Preliminary Project Schedule Submission
  - 3.4.2 Initial Project Schedule Submission
  - 3.4.3 Periodic Schedule Updates

- 3.4.4 Standard Activity Coding Dictionary
- 3.5 SUBMISSION REQUIREMENTS
  - 3.5.1 Data Disks
    - 3.5.1.1 File Medium
    - 3.5.1.2 Disk Label
    - 3.5.1.3 File Name
  - 3.5.2 Narrative Report
  - 3.5.3 Accepted Changes Verification
  - 3.5.4 Schedule Reports
    - 3.5.4.1 Activity Report
    - 3.5.4.2 Logic Report
    - 3.5.4.3 Total Float Report
    - 3.5.4.4 Earnings Report
  - 3.5.5 Network Diagram
    - 3.5.5.1 Continuous Flow
    - 3.5.5.2 Project Milestone Dates
    - 3.5.5.3 Critical Path
    - 3.5.5.4 Banding
    - 3.5.5.5 S-Curves
    - 3.5.5.6 Bar Chart
- 3.6 PERIODIC PROGRESS MEETINGS
  - 3.6.1 Meeting Attendance
  - 3.6.2 Update Submission Following Progress Meeting
  - 3.6.3 Progress Meeting Contents
    - 3.6.3.1 Start and Finish Dates
    - 3.6.3.2 Time Completion
    - 3.6.3.3 Cost Completion
    - 3.6.3.4 Logic Changes
    - 3.6.3.5 Other Changes
- 3.7 REQUESTS FOR TIME EXTENSIONS
  - 3.7.1 Justification of Delay
  - 3.7.2 Submission Requirements
  - 3.7.3 Additional Submission Requirements
- 3.8 DIRECTED CHANGES
- 3.9 OWNERSHIP OF FLOAT

-- End of Section Table of Contents --

## SECTION 01320Q

## PROJECT SCHEDULE

## PART 1 GENERAL

## 1.1 DEFINITIONS

The Project Schedule shall be contract comprehensive, and shall track the progress of all open task orders in a single network analysis system. The Project Schedule shall be prepared and maintained in accordance with the provisions of this section.

A Construction Schedule shall be prepared and maintained for each task order. Construction schedules shall be in the form of a network analysis system except as noted below. When allowed, construction schedules may be in the form of a progress chart using ENG Form 2454, Construction Progress Chart. Construction Progress Charts shall be in accordance with the provisions of FAR 52.246-15, Schedules for Construction Contracts.

## 1.2 APPLICABILITY

The requirements of this section apply to the contract Project Schedule and the construction schedules of all task orders valued at \$100,000 or more, and with a duration greater than 120 calendar days, unless otherwise noted in the task order. Task orders that do not meet these minimums may use Progress Charts.

All references to Project Schedule in this section shall mean the same as task order construction schedule for those task orders that exceed the minimum criteria stated above.

## 1.3 LEVEL OF DETAIL

The contract Project Schedule shall minimally include an activity for each feature of work in each task order. The activities in each task order shall be banded.

## 1.4 TASK ORDER DEPENDENCIES

Where a task order activity(ies) is/are impacted by an activity(ies) from another task order, this interrelationship shall be indicated in the contract Project Schedule.

## 1.5 ELECTRONIC SCHEDULE REQUIREMENT

The Project Schedule to be prepared by the Contractor shall be electronically prepared using software capable of generating a data file in the Standard Data Exchange Format (SDEF). The Project Schedule shall consist of a network analysis system as described below. In preparing this

system the scheduling of Construction is the sole responsibility of the contractor. The requirement for the system is included to assure adequate planning in the execution of the work and to assist the Contracting Officer in appraising the reasonableness of the proposed schedule and evaluating progress of the work for the purposes of payment.

#### 1.6 SUBMITTALS

Government acceptance is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

##### SD-01 Preconstruction Submittals

Preliminary Project Schedule; G.  
Initial Project Schedule; G.  
Periodic Schedule Updates; G.

Four copies of the schedules showing codes, values, categories, numbers, items, etc., as required.

Periodic schedule updates of both project and construction schedules shall be submitted monthly, including schedules prepared on ENG Form 2454.

##### SD-06 Test Reports

Narrative Report.  
Schedule Reports.

Four copies of the reports showing numbers, descriptions, dates, float, starts, finishes, durations, sequences, etc., as required.

##### SD-07 Certificates

Qualifications; G.

Documentation showing qualifications of personnel preparing schedule reports.

#### 1.7 QUALIFICATIONS

The Contractor shall designate an authorized representative who shall be responsible for the preparation of all required project schedule reports. This person shall have previously created and reviewed computerized schedules using the software selected by the Contractor. Qualifications of this individual shall be submitted to the Contracting Officer for review with the Preliminary Project Schedule submission.

## PART 2 PRODUCTS (Not Applicable)

## PART 3 EXECUTION

## 3.1 GENERAL

Pursuant to the Contract Clause, SCHEDULE FOR CONSTRUCTION CONTRACTS, a Project Schedule as described below shall be prepared. The scheduling of construction shall be the responsibility of the Contractor. Contractor management personnel shall actively participate in its development. Subcontractors and suppliers working on the project shall also contribute in developing and maintaining an accurate Project Schedule. The accepted Project Schedule shall be used to measure the progress of the work, to aid in evaluating time extensions, and to provide the basis of all progress payments.

## 3.2 BASIS FOR PAYMENT

The schedule shall be the basis for measuring Contractor progress. Lack of an accepted schedule or scheduling personnel shall result in an inability of the Contracting Officer to evaluate Contractor progress for the purposes of payment. Failure of the Contractor to provide all information, as specified below, shall result in the disapproval of the entire Project Schedule submission and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. In the case where Project Schedule revisions have been directed by the Contracting Officer and those revisions have not been included in the Project Schedule, then the Contracting Officer may hold retainage up to the maximum allowed by contract, each payment period, until revisions to the Project Schedule have been made.

## 3.3 ELECTRONIC PROJECT SCHEDULE

The computer software system utilized by the Contractor to produce the Project Schedule shall be capable of providing all requirements of this specification. Failure of the Contractor to meet the requirements of this specification shall result in the disapproval of the schedule. Manually generated schedules will not be accepted.

The system noted below is capable of generating a file in the Standard Data Exchange Format (SDEF). All electronic data submittals shall be in SDEF. SDEF information is available from the Contracting Officer.

Vendor/System with SDEF support:

Primavera Systems           PRIMAVERA PROJECT PLANNER (P3)

## 3.3.1 Use of the Critical Path Method

The Critical Path Method (CPM) of network calculation shall be used to generate the Project Schedule. The Contractor shall provide the Project Schedule in either the Precedence Diagram Method (PDM) or the Arrow Diagram Method (ADM).

### 3.3.2 Level of Detail Required

With the exception of the preliminary schedule submission, the Project Schedule shall include an appropriate level of detail. Failure to develop or update the Project Schedule or provide data to the Contracting Officer at the appropriate level of detail, as specified by the Contracting Officer, shall result in the disapproval of the schedule. The Contracting Officer will use, but is not limited to, the following conditions to determine the appropriate level of detail to be used in the Project Schedule.

#### 3.3.2.1 Activity Durations

Contractor submissions shall follow the direction of the Contracting Officer regarding reasonable activity durations. Reasonable durations are those that allow the progress of activities to be accurately determined between payment periods (usually less than 2 percent of all non-procurement activities' Original Durations shall be greater than 20 days).

#### 3.3.2.2 Procurement Activities

Tasks related to the procurement of long lead materials or equipment shall be included as separate activities in the project schedule. Long lead materials and equipment are those materials that have a procurement cycle of over 90 days. Examples of procurement process activities include, but are not limited to: submittals, approvals, procurement, fabrication, delivery, installation, start-up, and testing.

#### 3.3.2.3 Government Activities

Government and other agency activities that could impact progress shall be shown. These activities include, but are not limited to: approvals, inspections, utility tie-in, Government Furnished Equipment (GFE) and notice to proceed for phasing requirements.

#### 3.3.2.4 Responsibility

All activities shall be identified in the project schedule by the party responsible to perform the work. Responsibility includes, but is not limited to, the subcontracting firm, contractor work force, or government agency performing a given task. The responsible party for each activity shall be identified by the Responsibility Code.

#### 3.3.2.5 Work Areas

All activities shall be identified in the project schedule by the work area in which the activity occurs. Activities shall not be allowed to cover more than one work area. The work area of each activity shall be identified by the Work Area Code.

#### 3.3.2.6 Modification or Claim Number

Any activity that is added or changed by contract modification or used to

justify claimed time shall be identified by a mod or claim code that changed the activity. Activities shall not belong to more than one modification or claim item. The modification or claim number of each activity shall be identified by the Mod or Claim Number.

#### 3.3.2.7 Bid Item

All activities shall be identified in the project schedule by the Contract/Task Order Line Item to which the activity belongs. An activity shall not contain work in more than one line item. The line item for each appropriate activity shall be identified by the Bid Item Code.

#### 3.3.2.8 Feature of Work

All activities shall be identified in the project schedule according to the feature of work to which the activity belongs. Feature of work refers, but is not limited to a work breakdown structure for the project. The feature of work for each activity shall be identified by the Feature of Work Code.

#### 3.3.3 Scheduled Project Completion

The schedule interval shall extend from notice-to-proceed to the contract/task order completion date.

##### 3.3.3.1 Project Start Date

The schedule shall start no earlier than the date that the Notice to Proceed (NTP) was acknowledged. The Contractor shall include as the first activity in the project schedule an activity called "Start Project". The "Start Project" activity shall have: an "ES" constraint, a constraint date equal to the date that the NTP was acknowledged, and a zero day duration.

##### 3.3.3.2 Constraint of Last Activity

Completion of the last activity in the schedule shall be constrained by the task order completion date. Calculation on project updates shall be such that if the early finish of the last activity falls after the task order completion date, then the float calculation shall reflect a negative float on the critical path. The Contractor shall include as the last activity in the project schedule an activity called "End Project". The "End Project" activity shall have: an "LF" constraint, a constraint date equal to the completion date for the project, and a zero day duration.

##### 3.3.3.3 Early Project Completion

In the event the project schedule shows completion of the project prior to the task order completion date, the Contractor shall identify those activities that have been accelerated and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. Contractor shall specifically address each of the activities noted at every project schedule update period to assist the Contracting Officer in evaluating the Contractor's ability to actually complete prior to the task order period.

#### 3.3.4 Interim Completion Dates

Contractually specified interim completion dates shall also be constrained to show negative float if the early finish date of the last activity in that phase falls after the interim completion date. The required completion date of each task order shall be identified as interim completion dates on the Project Schedule.

#### 3.3.5 Default Progress Data Disallowed

Actual Start and Finish dates shall not be automatically updated by default mechanisms that may be included in CPM scheduling software systems. Actual Start and Finish dates on the CPM schedule shall match those dates provided from Contractor Quality Control Reports. Failure of the Contractor to document the Actual Start and Finish dates on the Daily Quality Control report for every in-progress or completed activity and ensure that the data contained on the Daily Quality Control reports is the sole basis for schedule updating shall result in the disapproval of the Contractor's schedule and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes.

#### 3.3.6 Out-of-Sequence Progress

Activities that have posted progress without predecessors being completed (Out-of-Sequence Progress) will be allowed only on a case-by-case acceptance of the Contracting Officer. The Contracting Officer may direct that changes in schedule logic be made to correct any or all out-of-sequence work.

#### 3.3.7 Extended Non-Work Periods

Designation of Holidays to account for non-work periods of over 5 days will not be allowed. Non-work periods of over 5 days shall be identified by addition of activities that represent the delays. Modifications to the logic of the project schedule shall be made to link those activities that may have been impacted by the delays to the newly added delay activities.

#### 3.3.8 Negative Lags

Lag durations contained in the project schedule shall not have a negative value.

### 3.4 PROJECT SCHEDULE SUBMISSIONS

The Contractor shall provide the submissions as described below. The data disk, reports, and network diagrams required for each submission are contained in paragraph SUBMISSION REQUIREMENTS.

#### 3.4.1 Preliminary Project Schedule Submission

The Preliminary Project Schedule, defining the Contractor's planned operations for the first 90 calendar days shall be submitted for approval within 20 calendar days after Notice to Proceed is acknowledged. The accepted preliminary schedule shall be used for payment purposes not to



exceed 90 calendar days after Notice to Proceed.

#### 3.4.2 Initial Project Schedule Submission

The Initial Project Schedule shall be submitted for acceptance within 60 calendar days after Notice to Proceed. The schedule shall provide a reasonable sequence of activities, which represent work through the entire project and shall be at a reasonable level of detail.

#### 3.4.3 Periodic Schedule Updates

Based on the result of progress meetings, specified in "Periodic Progress Meetings," the Contractor shall submit periodic schedule updates. These submissions shall enable the Contracting Officer to assess Contractor's progress. If the Contractor fails or refuses to furnish the information and project schedule data, which in the judgment of the Contracting Officer or authorized representative, is necessary for verifying the contractor's progress, the Contractor shall be deemed not to have provided an estimate upon which progress payment may be made.

#### 3.4.4 Standard Activity Coding Dictionary

The Contractor shall submit, with the Initial Project Schedule, a coding scheme that shall be used throughout the project for all activity codes contained in the schedule. The coding scheme submitted shall list the values for each activity code category and translate those values into project specific designations. For example, a Responsibility Code Value, "ELE", may be identified as "Electrical Subcontractor." Activity code values shall represent the same information throughout the duration of the contract. Once accepted with the Initial Project Schedule submission, changes to the activity coding scheme must be accepted by the Contracting Officer.

### 3.5 SUBMISSION REQUIREMENTS

The following items shall be submitted by the Contractor for the initial submission, and every periodic project schedule update throughout the life of the project:

#### 3.5.1 Data Disks

Two data disks or two sets of data disks containing the project schedule shall be provided. Data on the disks shall be in the Standard Data Exchange Format (SDEF), in accordance with ER-1-1-11, PROGRESS, SCHEDULES, AND NETWORK ANALYSIS SYSTEMS, Appendix A, Standard Data Exchange Format Specification (attached at the end of this Project Schedule specification.

##### 3.5.1.1 File Medium

Required data shall be submitted on 3.5-inch disks, formatted to hold 1.44 MB of data, under the MS-Windows operating system.

#### 3.5.1.2 Disk Label

A permanent exterior label shall be affixed to each disk submitted. The label shall indicate the type of schedule (Initial, Update, or Change), full contract and task order numbers, project name, project location, data date, name and telephone number or person responsible for the schedule, and the operating system and version used to format the disk.

#### 3.5.1.3 File Name

Each file submitted shall have a name related to either the schedule data date, project name, or contract and task order numbers. The Contractor shall develop a naming convention that will ensure that the names of the files submitted are unique. The Contractor shall submit the file naming convention to the Contracting Officer for approval.

#### 3.5.2 Narrative Report

A Narrative Report shall be provided with each update of the project schedule. This report shall be provided as the basis of the Contractor's progress payment request. The Narrative Report shall include: a description of activities along the critical path(s), a description of current and anticipated problem areas or delaying factors and their impact, and an explanation of corrective actions taken.

#### 3.5.3 Accepted Changes Verification

Only project schedule changes that have been previously accepted by the Contracting Officer shall be included in the schedule submission. The Narrative Report shall specifically reference, on an activity by activity basis, all changes made since the previous period and relate each change to documented, accepted schedule changes.

#### 3.5.4 Schedule Reports

The format for each activity for the schedule reports listed below shall contain: Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float. Actual Start and Actual Finish Dates shall be printed for those activities in progress or completed.

##### 3.5.4.1 Activity Report

A list of all activities sorted according to activity number and then sorted according to Early Start Date. For completed activities the Actual Start Date shall be used as the secondary sort.

##### 3.5.4.2 Logic Report

A list of Preceding and Succeeding activities for every activity in ascending order by activity number and then sorted according to Early Start Date. For completed activities the Actual Start Date shall be used as the secondary sort.

#### 3.5.4.3 Total Float Report

A list of all activities sorted in ascending order of total float. Activities that have the same amount of total float shall be listed in ascending order of Early Start Dates.

#### 3.5.4.4 Earnings Report

A compilation of the Contractor's Total Earnings on the project from the Notice to Proceed until the most recent Monthly Progress Meeting. This report shall reflect the Earnings of specific activities based on the agreements made in the field and approved between the Contractor and Contracting Officer at the most recent Monthly Progress Meeting. Provided that the Contractor has provided a complete schedule update, this report shall serve as the basis of determining Contractor Payment. Activities shall be grouped by bid item and sorted by activity numbers. This report shall: sum all activities in a bid item and provide a bid item percent; and complete and sum all bid items to provide a total project percent complete. The printed report shall contain, for each activity: Activity Number, Activity Description, Original Budgeted Amount, Total Quantity, Quantity to Date, Percent Complete (based on cost), Earnings to Date.

#### 3.5.5 Network Diagram

The network diagram shall be required on the initial schedule submission, on monthly schedule update submissions, whenever any logic changes have occurred, to include addition or deletion of activities due to modifications to the task order scope, or issuance of new task orders. The network diagram shall depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished. The activity or event number, description, duration, and estimated earned value shall be shown on the diagram. The Contracting Officer will use, but is not limited to, the following conditions to review compliance with this paragraph:

##### 3.5.5.1 Continuous Flow

Diagrams shall show a continuous flow from left to right with no arrows from right to left. The activity or event number, description, duration, and estimated earned value shall be shown on the diagram.

##### 3.5.5.2 Project Milestone Dates

Dates shall be shown on the diagram for start of project, any contract required interim completion dates, and contract completion dates.

##### 3.5.5.3 Critical Path

The critical path shall be clearly shown.

##### 3.5.5.4 Banding

Activities shall be grouped to assist in the understanding of the activity sequence. Typically, this flow will group activities by work area and/or

responsibility.

#### 3.5.5.5 S-Curves

A graph of anticipated earnings (S-Curves) showing cumulative for the duration of the project. The vertical scale shall show earnings/percent complete from 0%-100%. The horizontal scale shall be a time scale showing the calendar months of the project. Three curves shall be plotted on the same graph; the earnings/percent complete based on early finish dates; the earnings/percent complete based on late finish dates; the actual earnings/percent complete to date.

#### 3.5.5.6 Bar Chart

A bar chart covering the previous month's activities and progress, and the planned activities over 3 months projected into the future. The chart shall also include actual and anticipated earnings.

### 3.6 PERIODIC PROGRESS MEETINGS

Progress meetings to discuss payment shall include a monthly onsite meeting or other regular intervals mutually agreed to at the preconstruction conference. During this meeting the Contractor shall describe, on an activity by activity basis, all proposed revisions and adjustments to the project schedule required to reflect the current status of the project. The Contracting Officer will accept activity progress, proposed revisions, and adjustments as appropriate.

#### 3.6.1 Meeting Attendance

The Contractor's Project Manager and Scheduler shall attend the regular progress meeting.

#### 3.6.2 Update Submission Following Progress Meeting

A complete update of the project schedule containing all accepted progress, revisions, and adjustments, based on the regular progress meeting, shall be submitted not later than 4 working days after the monthly progress meeting.

#### 3.6.3 Progress Meeting Contents

Update information, including Actual Start Dates, Actual Finish Dates, Remaining Durations, and Cost-to-Date shall be subject to the approval of the Contracting Officer. The following is a minimum set of items that the Contractor shall address, on an activity by activity basis, during each progress meeting.

##### 3.6.3.1 Start and Finish Dates

The Actual Start and Actual Finish dates for each activity currently in-progress or completed.

#### 3.6.3.2 Time Completion

The estimated Remaining Duration for each activity in-progress. Time-based progress calculations must be based on Remaining Duration for each activity.

#### 3.6.3.3 Cost Completion

The earnings for each activity started. Payment will be based on earnings for each in-progress or completed activity. Payment for individual activities will not be made for work that contains quality defects. A portion of the overall project amount may be retained based on delays of activities.

#### 3.6.3.4 Logic Changes

All logic changes pertaining to Notice to Proceed on change orders, change orders to be incorporated into the schedule, contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, lag durations, issuance of task orders, and other changes that have been made pursuant to contract provisions shall be specifically identified and discussed.

#### 3.6.3.5 Other Changes

Other changes required due to delays in completion of any activity or group of activities include: 1) delays beyond the Contractor's control, such as strikes and unusual weather. 2) delays encountered due to submittals, Government Activities, deliveries or work stoppages which make re-planning the work necessary, and 3) a schedule which does not represent the actual prosecution and progress of the work.

### 3.7 REQUESTS FOR TIME EXTENSIONS

In the event the Contractor requests an extension of the task order completion date, he shall furnish such justification, project schedule data and supporting evidence as the Contracting Officer may deem necessary for a determination as to whether or not the Contractor is entitled to an extension of time under the provisions of the contract. Submission of proof of delay, based on revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is obligatory to any acceptance.

#### 3.7.1 Justification of Delay

The project schedule shall clearly display that the Contractor has used, in full, all the float time available for the work involved with this request.

The Contracting Officer's determination as to the number of allowable days of time extension on a task order shall be based upon the project schedule updates in effect for the time period in question, and other factual information. Actual delays that are found to be caused by the Contractor's own actions, which result in the extension of the schedule, will not be a cause for a time extension to the task order completion date.

### 3.7.2 Submission Requirements

The Contractor shall submit a justification for each request for a change in the task order completion date of under 2 weeks based upon the most recent schedule update at the time of the Notice to Proceed or constructive direction issued for the change. Such a request shall be in accordance with the requirements of other appropriate Contract Clauses and shall include, as a minimum:

- a. A list of affected activities, with their associated project schedule activity number.
- b. A brief explanation of the causes of the change.
- c. An analysis of the overall impact of the changes proposed.
- d. A sub-network of the affected area.

Activities impacted in each justification for change shall be identified by a unique activity code contained in the required data file.

### 3.7.3 Additional Submission Requirements

For any requested time extension of over 2 weeks, the Contracting Officer may request an interim update with revised activities for a specific change request. The Contractor shall provide this disk within 4 days of the Contracting Officer's request.

### 3.8 DIRECTED CHANGES

If Notice to Proceed (NTP) is issued for changes prior to settlement of price and/or time, the Contractor shall submit proposed schedule revisions to the Contracting Officer within 2 weeks of the NTP being issued. The proposed revisions to the schedule will be accepted by the Contracting Officer prior to inclusion of those changes within the project schedule. If the Contractor fails to submit the proposed revisions, the Contracting Officer may furnish the Contractor suggested revisions to the project schedule. The Contractor shall include these revisions in the project schedule until revisions are submitted, and final changes and impacts have been negotiated. If the Contractor has any objections to the revisions furnished by the Contracting Officer, the Contractor shall advise the Contracting Officer within 2 weeks of receipt of the revisions. Regardless of the objections, the Contractor shall continue to update the schedule with the Contracting Officer's revisions until a mutual agreement in the revisions is reached. If the Contractor fails to submit alternative revisions within 2 weeks of receipt of the Contracting Officer's proposed revisions, the Contractor will be deemed to have concurred with the Contracting Officer's proposed revisions. The proposed revisions will then be the basis for an equitable adjustment for performance of the work.

### 3.9 OWNERSHIP OF FLOAT

Float available in the schedule, at any time, shall not be considered for the exclusive use of either the Government or the Contractor.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01430

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 GENERAL REQUIREMENTS
  - 1.2.1 Subcontractors
  - 1.2.2 Notification
- 1.3 SUBMITTALS

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

- 3.1 PROTECTION OF ENVIRONMENTAL RESOURCES
  - 3.1.1 Land Resources
    - 3.1.1.1 Work Area Limits
    - 3.1.1.2 Protection of Landscape
    - 3.1.1.3 Reduction of Exposure of Unprotected Erodible Soils
    - 3.1.1.4 Protection of Disturbed Areas
    - 3.1.1.5 Contractor Facilities and Work Areas
  - 3.1.2 Disposal of Wastes
    - 3.1.2.1 Solid Wastes
    - 3.1.2.2 Chemical Wastes:
    - 3.1.2.3 Hazardous Wastes:
  - 3.1.3 Historical, Archeological, and Cultural Resources
  - 3.1.4 Water Resources
    - 3.1.4.1 Washing and Curing Water
    - 3.1.4.2 Deleted
    - 3.1.4.3 Stream Crossings
    - 3.1.4.4 Monitoring of Water Areas:
  - 3.1.5 Fish and Wildlife Resources
  - 3.1.6 Air Resources
    - 3.1.6.1 Particulates
    - 3.1.6.2 Hydrocarbons and Carbon Monoxide
    - 3.1.6.3 Odors
    - 3.1.6.4 Monitoring of Air Quality
  - 3.1.7 Sound Intrusions
- 3.2 POST CONSTRUCTION CLEANUP
- 3.3 RESTORATION OF LANDSCAPE DAMAGE
- 3.4 MAINTENANCE OF POLLUTION CONTROL FACILITIES
- 3.5 TRAINING OF CONTRACTOR PERSONNEL IN POLLUTION CONTROL



-- End of Section Table of Contents --

## SECTION 01430

## ENVIRONMENTAL PROTECTION

## PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

## STATE OF HAWAII DEPARTMENT OF HEALTH (HIDOH)

HIDOH, Chapter 43	Administrative Rules, Title 11, Community Noise Control
HIDOH, Chapter 59	Administrative Rules, Ambient Air Quality Standards

## 1.2 GENERAL REQUIREMENTS

This section covers prevention of environmental pollution and damage as the result of construction operations under this contract and for those measures set forth in the TECHNICAL REQUIREMENTS. For the purpose of this specification, environmental pollution and damage is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to man; or degrade the utility of the environment for aesthetic, cultural and/or historical purposes. The control of environmental pollution and damage requires consideration of air, water, and land, and includes management of visual aesthetics, noise, solid waste, radiant energy and radioactive materials, as well as other pollutants.

## 1.2.1 Subcontractors

Assurance of compliance with this section by subcontractors will be the responsibility of the Contractor.

## 1.2.2 Notification

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with the aforementioned Federal, State or local laws or regulations, permits, and other elements of the Contractor's environmental protection plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of proposed corrective action and take such action as may be approved. If the Contractor fails to comply promptly, the Contracting Officer may issue an order stopping all or part

of the work until satisfactory corrective action has been taken. No time extensions will be granted or costs or damages allowed to the Contractor for any such suspension.

### 1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

#### SD-06 Test Records

##### Environmental Protection Plan; G.

Within 30 calendar days of receipt of **task order** Notice to Proceed, the Contractor shall submit in writing an environmental protection plan. Approval of the Contractor's plan will not relieve the Contractor of his responsibility for adequate and continuing control of pollutants and other environmental protection measures. The environmental protection plan shall include but not be limited to the following:

a. A list of Federal, State, and local laws, regulations, and permits concerning environmental protection, pollution control and abatement that are applicable to the Contractor's proposed operations and the requirements imposed by those laws, regulations, and permits.

b. Methods for protection of features to be preserved within authorized work areas. The Contractor shall prepare a listing of methods to protect resources needing protection; i.e., trees, shrubs, vines, grasses and ground cover, landscape features, air and water quality, fish and wildlife, soil, historical, archeological, and cultural resources.

c. Procedures to be implemented to provide the required environmental protection and to comply with the applicable laws and regulations. The Contractor shall set out the procedures to be followed to correct pollution of the environment due to accident, natural causes, or failure to follow the procedures set out in accordance with the environmental protection plan.

d. Location of the solid waste disposal area.

e. Drawings showing locations of any proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials.

f. Environmental monitoring plans for the job site, including land, water, air, and noise monitoring.

- g. Traffic control plan.
- h. Methods of protecting surface and ground water during construction activities.
- i. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas.
- j. Plan of borrow area(s).
- k. Training for his personnel during the construction period.

## PART 2 PRODUCTS (NOT APPLICABLE)

## PART 3 EXECUTION

### 3.1 PROTECTION OF ENVIRONMENTAL RESOURCES

The environmental resources within the project boundaries and those affected outside the limits of permanent work under this contract shall be protected during the entire period of this contract. The Contractor shall confine his activities to areas defined by the drawings and specifications.

#### 3.1.1 Land Resources

Prior to the beginning of any construction, the Contractor shall identify all land resources to be preserved within the Contractor's work area. Except in areas indicated on the drawings or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without special permission from the Contracting Officer. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. Where such special emergency use is permitted, the Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs.

##### 3.1.1.1 Work Area Limits

Prior to any construction, the Contractor shall mark the areas that are not required to accomplish all work to be performed under this contract. Isolated areas within the general work area which are to be saved and protected shall also be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, the markers shall be visible. The Contractor shall convey to his personnel the purpose of marking and/or protection of all necessary objects.

##### 3.1.1.2 Protection of Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features indicated and defined on the drawings to be preserved shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques.

#### 3.1.1.3 Reduction of Exposure of Unprotected Erodible Soils

Earthwork brought to final grade shall be finished as indicated and specified. Side slopes and back slopes shall be protected as soon as practicable upon completion of rough grading. All earthwork shall be planned and conducted to minimize the duration of exposure of unprotected soils. Except in instances where the constructed feature obscures borrow areas, quarries, and waste material areas, these areas shall not initially be cleared in total. Clearing of such areas shall progress in reasonably sized increments as needed to use the areas developed as approved by the Contracting Officer.

#### 3.1.1.4 Protection of Disturbed Areas

Such methods as necessary shall be utilized to effectively prevent erosion and control sedimentation, including but not limited to the following:

- a. Retardation and Control of Runoff: Runoff from the construction site shall be controlled by construction of diversion ditches, benches, and berms to retard and divert runoff to protected drainage courses, and any measures required by areawide plans approved under Paragraph 208 of the Clean Water Act.
- b. Erosion and Sedimentation Control Devices: The Contractor shall construct or install all temporary and permanent erosion and sedimentation control features as indicated on the drawings. Temporary erosion and sediment control measures such as berms, dikes, drains, sedimentation basins, grassing, and mulching shall be maintained until permanent drainage and erosion control facilities are completed and operative.
- c. Sediment Basins: Sediment from construction areas shall be trapped in temporary or permanent sediment basins in accordance with basin plans shown on the drawings. The basins shall accommodate the runoff of a local design year storm. After each storm, the basins shall be pumped dry and accumulated sediment shall be removed as necessary to maintain basin effectiveness. Overflow shall be controlled by paved weir or by vertical overflow pipe, draining from the surface. The collected topsoil sediment shall be reused for fill on the construction site, and/or conserved (stockpiled) for use at another site(s). The Contractor shall institute effluent quality monitoring programs as required by State and local environmental agencies.

#### 3.1.1.5 Contractor Facilities and Work Areas

- a. Location of Field Offices, Storage, and Other Contractor Facilities: The Contractors' field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities shall be made only on approval by the Contracting Officer.

- b. Borrow Areas on Government Property: Borrow areas shall be managed to minimize erosion and to prevent sediment from entering nearby waters.
- c. Spoil Areas on Government Property: Spoil areas shall be managed and controlled to limit spoil to areas designated on the drawings and prevent erosion of soil or sediment from entering nearby waters. Spoil areas shall be developed in accordance with the grading plan indicated on the drawings.
- d. Temporary Excavations and Embankments: Temporary excavations and embankments for plant and/or work areas shall be controlled to protect adjacent areas from despoilment.

### 3.1.2 Disposal of Wastes

Disposal of wastes shall be as specified in Section 01900 MISCELLANEOUS PROVISIONS, **the task order** and as specified hereinafter.

#### 3.1.2.1 Solid Wastes

Solid wastes (excluding clearing debris) shall be placed in containers which are emptied on a regular schedule. All handling and disposal shall be conducted to prevent contamination. Segregation measures shall be employed such that no hazardous or toxic waste will become commingled with solid waste. The Contractor shall transport all solid waste off Government property and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. The Contractor shall comply with site procedures and with Federal, State, and local laws and regulations pertaining to the use of landfill areas.

#### 3.1.2.2 Chemical Wastes:

Chemicals shall be dispensed in a way to adequately ensure no spillage to ground or water. Periodic inspections of dispensing areas to identify leakage and initiate corrective action shall be performed and documented. This documentation will be periodically reviewed by the Government. Chemical waste shall be collected in corrosion resistant containers with care taken to ensure compatibility. Collection drums shall be monitored and removed to a staging or storage area when contents are within six inches of the top. All waste shall be disposed of in accordance with Federal and local laws and regulations.

#### 3.1.2.3 Hazardous Wastes:

The Contractor shall take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing and shall collect waste in suitable containers observing compatibility. The Contractor shall transport all hazardous waste off Government property and dispose of it in compliance with Federal and local laws and regulations. Spills of hazardous or toxic materials shall be immediately reported to the Contracting Officer. Cleanup and cleanup costs due to spills shall be the

responsibility of the Contractor.

### 3.1.3 Historical, Archeological, and Cultural Resources

Existing historical, archeological, and cultural resources within the Contractor's work area will be so designated by the Contracting Officer if any has been identified. The Contractor shall take precautions to preserve all such resources as they existed at the time they were pointed out to him. The Contractor shall provide and install all protection for these resources so designated and shall be responsible for their preservation during this contract. If during excavation or other construction activities in areas with existing or known resources, as well as in any other work area, any previously unidentified or unanticipated resources are discovered or found, all activities that may damage or alter such resources shall be temporarily suspended. These resources or cultural remains (prehistoric or historic surface or subsurface) include but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rocks or coral alignments, paving, wall, or other constructed features; and any indication of agricultural or other uses. Upon such discovery or find, the Contractor shall immediately notify the Contracting Officer. When so notified, the Contracting Officer will initiate action so that prompt and proper data recovery can be accomplished. In the mean time, recording and preservation of historical and archeological finds during construction activities shall be reported in accordance with the SPECIAL CONTRACT REQUIREMENTS.

### 3.1.4 Water Resources

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters. Special management techniques as set out below shall be implemented to control water pollution by the listed construction activities which are included in this contract.

#### 3.1.4.1 Washing and Curing Water

Waste waters directly derived from construction activities shall not be allowed to enter water areas. These waste waters shall be collected and placed in retention ponds where suspended material can be settled out or the water evaporates so that pollutants are separated from the water.

#### 3.1.4.2 Deleted

#### 3.1.4.3 Stream Crossings

Stream crossings shall be controlled during construction. Crossings shall provide movement of materials or equipment which do not violate water pollution control standards of the Federal, State or local government.

#### 3.1.4.4 Monitoring of Water Areas:

Monitoring of water areas affected by construction activities shall be the

responsibility of the Contractor. All water areas affected by construction activities shall be monitored by the Contractor.

#### 3.1.5 Fish and Wildlife Resources

The Contractor shall keep construction activities under surveillance, management and control to minimize interference with, disturbance to and damage of fish and wildlife. Species that require specific attention along with measures for their protection will be listed by the Contractor prior to beginning of construction operations.

#### 3.1.6 Air Resources

The Contractor shall keep construction activities under surveillance, management and control to minimize pollution of air resources. All activities, equipment, processes, and work operated or performed by the Contractor in accomplishing the specified construction shall be in strict accordance with HIDOH, Chapter 59, HIDOH, Chapter 60, and all Federal emission and performance laws and standards. Ambient Air Quality Standards set by the Environmental Protection Agency shall be maintained for those construction operations and activities specified in this section. Special management techniques as set out below shall be implemented to control air pollution by the construction activities which are included in the contract.

##### 3.1.6.1 Particulates

- a. Dust particles, aerosols, and gaseous by-products from all construction activities, processing and preparation of materials, such as from asphaltic batch plants, shall be controlled at all times, including weekends, holidays and hours when work is not in progress.
- b. The Contractor shall maintain all excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and all other work areas within or outside the project boundaries free from particulates which would cause the air pollution standards mentioned in paragraph Air Resources, herein before, to be exceeded or which would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, light bituminous treatment, baghouse, scrubbers, electrostatic precipitators or other methods will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated at such intervals as to keep the disturbed area damp at all times. The Contractor must have sufficient competent equipment available to accomplish this task. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs.

##### 3.1.6.2 Hydrocarbons and Carbon Monoxide

Hydrocarbons and carbon monoxide emissions from equipment shall be controlled to Federal and State allowable limits at all times.



### 3.1.6.3 Odors

Odors shall be controlled at all times for all construction activities, processing and preparation of materials.

### 3.1.6.4 Monitoring of Air Quality

Monitoring of air quality shall be the responsibility of the Contractor. All air areas affected by the construction activities shall be monitored by the Contractor.

### 3.1.7 Sound Intrusions

The Contractor shall keep construction activities under surveillance, and control to minimize damage to the environment by noise. The Contractor shall comply with the provisions of HDOH, Chapter 43.

## 3.2 POST CONSTRUCTION CLEANUP

The Contractor shall clean up area(s) used for construction.

## 3.3 RESTORATION OF LANDSCAPE DAMAGE

The Contractor shall restore all landscape features damaged or destroyed during construction operations outside the limits of the approved work areas. Such restoration shall be in accordance with the plan submitted for approval by the Contracting Officer. This work will be accomplished at the Contractor's expense.

## 3.4 MAINTENANCE OF POLLUTION CONTROL FACILITIES

The Contractor shall maintain all constructed facilities and portable pollution control devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

## 3.5 TRAINING OF CONTRACTOR PERSONNEL IN POLLUTION CONTROL

The Contractor shall train his personnel in all phases of environmental protection. The training shall include methods of detecting and avoiding pollution, familiarization with pollution standards, both statutory and contractual, and installation and care of facilities (vegetative covers, and instruments required for monitoring purposes) to ensure adequate and continuous environmental pollution control.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01451Q

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 DEFINITIONS
- 1.3 SUBMITTALS
- 1.4 PAYMENT

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

- 3.1 GENERAL
- 3.2 QUALITY CONTROL PLAN
  - 3.2.1 Contract Quality Control
  - 3.2.2 Task Order-Specific Quality Control
  - 3.2.3 Content of the CQC Plan
  - 3.2.4 Content of the Task Order-Specific Quality Control Plan
  - 3.2.5 Acceptance of Plan
  - 3.2.6 Notification of Changes
- 3.3 COORDINATION MEETINGS
- 3.4 QUALITY CONTROL ORGANIZATION
  - 3.4.1 General
  - 3.4.2 CQC System Manager
  - 3.4.3 Quality Control Representative
  - 3.4.4 CQC Personnel
  - 3.4.5 Additional Requirement
  - 3.4.6 Organizational Changes
- 3.5 SUBMITTALS AND DELIVERABLES
- 3.6 CONTROL
  - 3.6.1 Preparatory Phase
  - 3.6.2 Initial Phase
  - 3.6.3 Follow-up Phase
  - 3.6.4 Additional Preparatory and Initial Phases
- 3.7 TESTS
  - 3.7.1 Testing Procedure
  - 3.7.2 Testing Laboratories
    - 3.7.2.1 Validation Requirements
    - 3.7.2.2 Exception
    - 3.7.2.3 Capability Check
    - 3.7.2.4 Capability Recheck

- 3.7.3 Onsite Laboratory
- 3.7.4 Furnishing or Transportation of Samples for Testing
- 3.8 COMPLETION INSPECTION
  - 3.8.1 Punch-Out Inspection
  - 3.8.2 Pre-Final Inspection
  - 3.8.3 Final Acceptance Inspection
- 3.9 DOCUMENTATION
- 3.10 NOTIFICATION OF NONCOMPLIANCE

-- End of Section Table of Contents --

## SECTION 01451Q

## CONTRACTOR QUALITY CONTROL

## PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

## AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 3740	(1996) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
-------------	---

ASTM E 329	(1995b) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction
------------	---

## 1.2 DEFINITIONS

The Contractor's **Quality Control Program** shall apply to the entire contract, including individual task orders. The Contractor is responsible for quality control and shall establish and maintain an effective quality control program in compliance with the Contract Clause titled "Inspection of Construction." The quality control program shall consist of plans, procedures, and organization necessary to produce an end product that complies with the contract requirements. The program shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence.

The Contractor shall develop and implement a Quality Control Plan that documents the methods and procedures to be used to ensure quality construction throughout the contract.

Quality control on each task order shall be governed by a **Task Order-Specific Quality Control Plan**.

## 1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. The following shall be submitted in accordance with section 01330 SUBMITTAL PROCEDURES:

## SD-01 Preconstruction Submittals

Quality Control Plan; G.

Task Order-Specific Quality Control Plan; G.

## 1.4 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

## PART 2 PRODUCTS (NOT APPLICABLE)

## PART 3 EXECUTION

## 3.1 GENERAL

The project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with quality requirements specified in the contract and task order. The project superintendent in this context shall mean the individual with the responsibility for the overall management of the task order including quality and production.

## 3.2 QUALITY CONTROL PLAN

## 3.2.1 Contract Quality Control

The Contractor shall furnish for review by the Government, not later than 30 days after contract award, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of the Contract Clause titled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, test, records, and forms to be used. The Government will consider an interim plan for the first 90 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim task order-specific plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

## 3.2.2 Task Order-Specific Quality Control

The task order-specific quality control (QC) plan shall be submitted to the Contracting Officer for acceptance not later than 14 days, or an agreed to shorter period, after receipt of the task order notice to proceed. The task order-specific quality control plan shall be developed such that it applies to the specific conditions of the individual task order. Work on task orders shall not commence prior to receiving the Contracting Officer's written acceptance of both the contract Quality Control Plan and the task order-specific quality control plan.

### 3.2.3 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

- a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the Project Manager or someone higher in the Contractor's organization.
- b. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.
- c. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, designers of record, consultants, A/E's, offsite fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with Section 01330 SUBMITTAL PROCEDURES or Section 01012, DESIGN AFTER AWARD, as applicable.
- d. For all proposed QC materials testing laboratories the contractor must submit a current HED or MTC letter of validation.
- e. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.
- f. Procedures for tracking design and construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.
- g. Reporting procedures, including proposed reporting formats.

### 3.2.4 Content of the Task Order-Specific Quality Control Plan

The Task Order-Specific Quality Control Plan shall include, as a minimum, the following to cover all task order construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

- a. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function. Technicians responsible for sampling and testing of concrete shall be certified by the American Concrete Institute (ACI) or the

Concrete Technicians Association of Hawaii (CTAH). Proof of certification shall be included in the task specific-quality control Plan. Personnel qualifications may be furnished incrementally as the work progresses, but in no case, less than fourteen (14) calendar days before personnel are required on the job.

b. A copy of the letter to the Quality Control Representative (QCR) signed by the CQCSM which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the QCR, including authority to stop work which is not in compliance with the contract. A copy of this letter shall also be furnished to the Government.

c. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test.

d. A list of the definable features of work. A definable feature of work is a task that is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting, but may also be developed as design progresses. Definable features must be identified prior to construction of that feature.

#### 3.2.5 Acceptance of Plan

Acceptance of the Contractor's plans is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in his CQC Plan, task order-specific QC plan, and operations including removal of personnel, as necessary, to obtain the quality specified.

#### 3.2.6 Notification of Changes

After acceptance of the CQC and task order-specific QC Plans, the Contractor shall notify the Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

#### 3.3 COORDINATION MEETINGS

After the Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control program. The CQC Plan shall be submitted for review a minimum of 7 calendar days prior to the Coordination Meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control

activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting will be prepared by the Government and signed by both the Contractor and the Contracting Officer's Representative. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures that may require corrective action by the Contractor.

During the pre-work conference for each task order, the contractor and the Government will discuss the details and implementation of the task order-specific QC plan. The contractor's task order-specific QC plan shall be submitted at this meeting.

### 3.4 QUALITY CONTROL ORGANIZATION

#### 3.4.1 General

The requirements for the CQC organization are a CQC System Manager (CQCSM), Quality Control Representatives (QCR), and sufficient number of additional qualified personnel to ensure contract compliance. The Safety and Health Manager shall receive direction and authority from the CQC System Manager and shall serve as a member of the CQC staff. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization. The Contractor shall provide a QCR on each task order who shall be at the site at all times during progress of the work and with complete authority and responsibility to take any action necessary to ensure contract compliance with the contract. All CQC staff members shall be subject to acceptance by the Contracting Officer.

The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Complete records of all letters, material submittals, shop drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to the Contracting Officer.

#### 3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of CQC on the contract and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall be a construction person with a minimum of five (5) years experience in quality control on Department of Defense construction projects similar in size and scope to this contract. The CQC System Manager shall be employed by the prime Contractor. The CQC System Manager shall be assigned no other duties. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as the designated CQC System Manager.



### 3.4.3 Quality Control Representative

The Contractor shall identify as Quality Control Representative (QCR) an individual within the onsite work organization who shall be responsible for management of CQC on the task order and have the authority to act in all CQC matters on the task order for the Contractor. The QCR shall be a construction person with a minimum of three (3) years experience in quality control on Department of Defense construction projects similar in size and scope to the task order. The QCR shall be on the site at all times during construction and shall be employed by the prime Contractor. The QCR shall be assigned as quality control representative, but may have duties as project superintendent in addition to quality control, unless otherwise stated in the task order. An alternate for the QCR shall be identified in the plan to serve in the event of the QCR's absence. The requirement for the alternate shall be the same as for the designated QCR.

### 3.4.4 CQC Personnel

In addition to CQC personnel specified elsewhere in the contract, the Contractor shall provide as part of the CQC organization specialized personnel to assist the CQC System Manager and QCR. Unless otherwise stated in the task order, these individuals, when required, may be employees of the prime or subcontractor; shall be responsible to the CQC System Manager and QCR; be physically present at the construction site during work on their areas of responsibility; have the necessary education and/or experience in accordance with the experience matrix listed herein.

#### Experience Matrix

Area	Qualifications
a. Civil	Graduate Civil Engineer with 2 years experience in the type of work being performed on this project or technician with 5 yrs related experience
b. Mechanical	Graduate Mechanical Engineer with 2 yrs experience or person with 5 yrs related experience
c. Electrical	Graduate Electrical Engineer with 2 yrs related experience or person with 5 yrs related experience
d. Structural	Graduate Structural Engineer with 2 yrs experience or person with 5 yrs related experience
e. Architectural	Graduate Architect with 2 yrs

## Experience Matrix

experience or person with 5 yrs  
related experience

- |    |                                  |   |
|----|----------------------------------|---|
| f. | Environmental                    | Graduate Environmental Engineer<br>with 3 yrs experience                  |
| g. | Submittals                       | Submittal Clerk with 1 yrs<br>experience                                  |
| h. | Occupied family housing          | Person, customer relations<br>type, coordinator experience                |
| i. | Concrete, Pavements<br>and Soils | Materials Technician with 2 yrs<br>experience for the appropriate<br>area |

If it is subsequently determined by the Contracting Officer that the minimum contract CQC requirements are not being met, the Contractor may be required to provide additional staff personnel to the CQC organization at no cost to the Government.

## 3.4.5 Additional Requirement

The CQC System Manager, all Quality Control Representatives, and any alternates shall have completed the course entitled "Construction Quality Management For Contractors" within the past 5 years. This course is periodically offered at the General Contractors Association of Hawaii.

## 3.4.6 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance. Requests shall include the names, qualifications, duties, and responsibilities of each proposed replacement. Upon acceptance of any changes, the Contractor shall revise the CQC plan to accurately reflect the changes. The CQC plan shall be kept current at all times during the life of the contract.

## 3.5 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall be made as specified in Section 01330 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements. When Section 15950A, Heating, Ventilating and Air Conditioning (HVAC) Control Systems; Section 15951A, Direct Digital Control for HVAC; Section 15990A, Testing, Adjusting, and Balancing of HVAC Systems; or Section 15995A, Commissioning of HVAC Systems, are included in the contract, the submittals required by those sections shall be coordinated with Section 01330, Submittal Procedures, to ensure adequate time is allowed for each type of submittal required.

### 3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. The CQC System Manager or QCR shall conduct at least three phases of control for each definable feature of work as follows:

#### 3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

- a. A review of each paragraph of applicable specifications.
- b. A review of the contract drawings.
- c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.
- d. Review of provisions that have been made to provide required control inspection and testing.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.
- g. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.
- i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.
- j. Discussion of the initial control phase.
- k. The Government shall be notified at least 2 workdays in advance of beginning the preparatory control phase for construction on Oahu. For construction in areas other than Oahu, a minimum of 7 calendar days advance notice is required. This phase shall include a meeting conducted by the CQCSM or QCR and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQCSM or QCR and attached to the daily CQC report. The Contractor shall instruct

applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

#### 3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.
- c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.
- d. Resolve all differences.
- e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
- f. The Government shall be notified at least 1 workday in advance of beginning the initial phase for construction on Oahu. For construction in areas other than Oahu, a minimum of 7 calendar days advance notice is required. Separate minutes of this phase shall be prepared by the CQCSM or QCR and attached to the daily CQC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.
- g. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

#### 3.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work that may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

#### 3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if the quality of on-going work is unacceptable, if there are changes in the applicable CQC staff, onsite production supervision or work crew, if work on a definable feature is resumed after a substantial period of inactivity, or if other problems develop.

### 3.7 TESTS

#### 3.7.1 Testing Procedure

The Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product that conforms to contract requirements. Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and/or acceptance tests when specified. The Contractor shall obtain the services of an industry-recognized testing laboratory approved by the Honolulu Engineer District (HED), or may establish a testing laboratory at the project site acceptable to the Contracting Officer. No approved Contractor's Quality Control (CQC) laboratory may act as both CQC materials testing laboratory and the Government's Quality Assurance (QA) laboratory on the same project.

Additionally, tests contractually required to be performed by an industry-recognized testing laboratory shall not be accomplished by the Contractor-established on-site laboratory.

The Contractor's testing procedures shall include the following activities and shall record and provide the following data:

- a. Verify that testing procedures comply with contract requirements.
- b. Verify that facilities and testing equipment are available and comply with testing standards.
- c. Check test instrument calibration data against certified standards.
- d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
- e. Results of all tests taken, both passing and failing tests, shall be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test shall be given. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility shall be provided directly to the Contracting Officer. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.

#### 3.7.2 Testing Laboratories

##### 3.7.2.1 Validation Requirements

Any laboratory used by the Contractor for testing aggregate, concrete, bituminous materials, soils, rock, and other construction materials must possess a current validation letter prior to performance of testing by that laboratory. Validation shall be obtained through the Corps of Engineers

Materials Testing Center (MTC) in Vicksburg, MS. Validation may be initiated by completing an Inspection Request Form and questionnaire that are available directly from the MTC or from the MTC website, <http://www.wes.army.mil/SL/MTC/inspection.htm>.

The MTC also maintains a website listing validated laboratories at: <http://www.wes.army.mil/SL/MTC/ValStatesTbl.htm>.

#### 3.7.2.2 Exception

The validation letters already obtained from HED in 2001 and 2002 will be considered acceptable proof of validation through its expiration date. Upon expiration, laboratories must be revalidated by the MTC, as required above. The validation status of laboratories in Hawaii may be found at: <http://www.poh.usace.army.mil/Construction/LabValidation/labvalidation.html>.

#### 3.7.2.3 Capability Check

The Government reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel shall meet criteria detailed in ASTM D 3740 and ASTM E 329.

#### 3.7.2.4 Capability Recheck

If the selected laboratory fails the capability check, the Contractor shall reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.

#### 3.7.3 Onsite Laboratory

The Government reserves the right to utilize the Contractor's control testing laboratory and equipment to make quality assurance tests and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

#### 3.7.4 Furnishing or Transportation of Samples for Testing

Costs incidental to the transportation of samples or materials shall be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Government shall be delivered to a testing laboratory on the Island of Oahu, State of Hawaii, designated by the Contracting Officer. Coordination for each specific test, exact delivery location, and dates will be made through the Government field office.

### 3.8 COMPLETION INSPECTION

#### 3.8.1 Punch-Out Inspection

Near the completion of all work or any increment thereof established by a

completion time stated in the Special Clause entitled "Commencement, Prosecution, and Completion of Work," or stated elsewhere in the specifications, the CQC System Manager or QCR shall conduct an inspection of the work and develop a punch list of items which do not conform to the approved drawings and specifications. Such a list of deficiencies shall be included in the CQC documentation, as required by paragraph DOCUMENTATION below, and shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager, QCR, or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final inspection.

#### 3.8.2 Pre-Final Inspection

The Government will perform this inspection to verify that the facility is complete and ready to be occupied. The CQCSM or QCR shall develop a punch list of items that do not conform to the contract documents. The Government will review the punch list and add to or correct the items listed. The CQCSM or QCR shall incorporate Government comments and provide a Pre-Final Punch List. The Contractor's CQC System Manager or QCR shall ensure that all items on this list have been corrected before notifying the Government to schedule a Final inspection with the customer.

Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment thereof if the project is divided into increments by separate completion dates.

#### 3.8.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at this inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil Facility Engineer user groups, and major commands may also be in attendance. The Contractor shall notify the Contracting Officer at least 14 days prior to the proposed final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work to be performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause titled "Inspection of Construction".

#### 3.9 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed on each task order. These records shall include the work of subcontractors and suppliers and shall be prepared using government-provided software, QCS

(see Section 01312), that includes, as a minimum, the following information:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase should be identified (Preparatory, Initial, Follow-up). List deficiencies noted along with corrective action.
- e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- f. Submittals reviewed, with contract reference, by whom, and action taken.
- g. Off-site surveillance activities, including actions taken.
- h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- i. Instructions given/received and conflicts in plans and/or specifications.
- j. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. Unless otherwise directed by the Contracting Officer the original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager or QCR. The report from the CQC System Manager or QCR shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

### 3.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected



noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

-- End of Section --